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ABSTRACT'

An analysis is presented of the position of American. community colleges in the nation's educational system. First, background is presented on the historical development of the community college; forces contributing to the rise of higher education and the emergence of junior colleges; and the expansion of the role of two-year colleges to include community services and remedial education in addition to transfer, occupational, and 🤏 postsecondary terminal programs. This section also analyzes forces affecting community college growth over the past four decades, including increased educational access, the student consumerism movement, the /increasing enrollment of part-time students, and the absorption by community colleges of the educational functions of other agencies. The next section looks at community college faculty, providing information on their educational background and professional involvement in contrast to their four-year college counterparts; the faculty union movement; and factors such as long working hours and underprepared students which erode faculty job satisfaction. Curriculum and instruction in the community college are discussed next, with particular focus on transfer, occupational, and community service curricula. The paper examines the dilemma faced by college leaders attempting to maintain their institution's place in graded education, while providing a variety of educative services to their constituents on an open-door basis. A number of tables conclude the paper. (LAL)

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### THE COMMUNITY COLLEGE IN THE AMERICAN EDUCATIONAL SYSTEM

Arthur M. Cohen

Educational theorists as diverse as Ivan Illich and Thomas Green have traded the configurations of the American educational system. Illich(1970) explained how the attainment of each level of schooling creates a demand for the next level, and effects a form of regressive taxation since the participants in the system's upper reaches tend to be drawn from the higher income groups. He deplored the power of a system that could allocate a person's position in society by determining who was learned and thus capable of obtaining high-status occupation.

Green (1980) analyzed the system itself, describing it as a set of schools and colleges related by a medium of exchange comprised of the certificates, diplomas, and degrees by which the activities in one school can be recognized for those that go on in another. The system is organized in a sequence with students prepared in one grade to continue in the next in line. It distributes educational benefits as people learn, and it distributes certificates that have market value among employers. The institutions at the system's core are those whose certificates are perceived as having the greatest value, both as cachets for students going on to the next grade and among agencies outside the system. In higher education the core includes the traditional liberal arts colleges and the major research universities, along with their associated graduate and professional school programs. The proprietary trades schools tend to be at the system's periphery, while corporate and professional association non-graded educational activities are outside

it.

This paper examines the position of the American community colleges in the educational system. It discusses their traditional education effort at the level of Grades 13 and 14; their early attempts to gain a place near the system's core, and the forces that have moved them toward the margin. It concludes with an examination of the dilemma faced by community college leaders who would maintain their institution's place in graded education but at the same time continue providing a variety of educative and quasi-educative services to their constituents on an open-access basis.

## Background

Community colleges are relatively recent arrivals in the American educational system, outgrowths of the junior colleges that began in the early years of the Twentieth Century when publicly supported higher education was just beginning to move toward its current prominent position. Several forces contributed to the rise of higher education and the newly emergent two-year colleges: the introduction of scientific research, the expansion of professional schools, the demand for paraprofessional and technological aides, and the drive for equality of educational opportunity for all people regardless of gender, ethnicity, or family income. The junior colleges would serve many of these people as convenient, accessible points of entry to the workplace and to higher levels of schooling.

Secondary school growth also fostered junior college development in the early decades. Between 1910 and 1940, for those students who had entered the fifth grade eight years earlier, high-school graduation

rates increased from 7% to 50%. Since one of the major outcomes of schooling is the demand for more schooling, the rapidly escalating number of high, school graduates forced the expansion of higher education. And since the increased percentage of the age group seeking entry to college resulted in a demand for non-traditional curriculums, collegiate institutions were forced to expand their scope as well as their size. The universities could grow only so fast and so diverse; in most states a network of junior colleges developed as a response. It soon became a widespread group of buffer institutions, preparing its entrants for university-level studies or diverting them toward other pursuits.

The first publicly supported junior colleges opened in the first decade of the twentieth century, outnumbered by the private junior colleges until 1950 when they began their most rapid growth. They offered transfer education enabling students to complete the first two years of baccalaureate studies; occupational programs leading to certificates of completion for curriculum that might take two years or less to complete; and post secondary school terminal curriculum for students who would not go on to the university but who sought an additional year or two of preparation for home and family living or for clerical and other entry level jobs in business.

Following World War II the trend toward increased years of formal schooling moved great numbers of students into post-secondary institutions. Talk of universal higher education became common when, in 1947 the President's Commission on Higher Education recommended that post-secondary instruction be made available to all individuals who

could profit from such exposure. The idea that the ultimate benefit to the state would far exceed the cost led to magnified support for post-secondary institutions that would provide occupational preparation, offer instruction in citizenship and basic skills, and allow young people a place to develop during a period of prolonged adolescence. By 1950 half the students who had entered the fifth grade eight years earlier were graduating high school, and 40 percent of them were entering college. By 1960 75 percent of the age group graduated high school and 60 percent of them entered college (Table 1). This increase in the rate of college-going was enhanced by the junior colleges, which by that time were open in nearly every state and were admitting students with little regard for their prior academic preparation.

During the first twenty years after World War II the junior colleges added two functions to their transfer, occupational, and post high school terminal programs and began calling themselves community colleges. The additional functions included community services, providing cultural and educational programs that typically did not lead to transfer or specific jobs, and remedial studies, those courses and activities designed to compensate for the students' defects in prior learning. Community services was added deliberately, promoted by leaders who saw a broader role for the junior college as a full-service education agency for people of all ages. Remedial studies, on the other hand, was adopted perforce as a legacy of the postsecondary terminal courses, combined with adult basic education and, toward 1965, the necessity of remedying the defects in the educational experience of the recent high school graduates. Thus remedial education has been attached

to nearly all the programs. These additional functions, coupled with the expansion in the population and the rate of college going, led to substantial public community college growth so that by the 1980s the nearly 1000 institutions were enrolling 4.5 million students, or more than one-third of all people engaged in formal postsecondary education. The colleges had grown large; 45 of them had more than 15,000 students enrolled.

Community college growth over the past four decades has resulted from several forces, some affecting the growth of institutions at all-levels, with others characteristic of the two-year colleges themselves. The growth in all types of schools is attributable to society's expanding expectations of what the schools can do, the percent of the age group participating in formal schooling, and student consumerism. Ravitch enumerates the broadened expectations assigned to the schools: "Preserve democracy, eliminate poverty, lower the crime rate, enrich the common culture, reduce unemployment, ease the assimilation of immigrants to the nation, overcome differences between ethnic groups, advance scientific and technological progress, prevent traffic accidents, raise health standards, refine moral character, and guide young people into useful occupations (1983, p.xii)." Community colleges developed programs in each of these areas.

The percent of the age group in school that increased steadily until the mid 1960s, when it seemed to level off, both fostered community college growth and was enhanced by it. In 1900 there were around 15 million Americans aged 15 to 24 and 232,000, or less than two percent, were enrolled in college. In 1981 there were 30 million 18 to

24 year-olds and more than 12 million of them, or 42 percent, were in college. The community colleges contributed by making access easier for people who in an earlier era would not have considered college going: minority-group and low-ability students, students from low-income families, and older students who for whatever reasons had missed their chance to attend college privately.

The colleges also fed on the student consumer movement. The shift of college purpose from transmitting the culture and preparing people for high status professions to providing them with nearly any educational activity they desired had been labeled consumerism. traditional intent of higher education; to transmit knowledge and stimulate intellectual development, fell behind the presumed desires of the consumers to find a job, protect their health, get the most for their money, and adjust satisfactorily to their life. In such a climate all subjects are of equal value and the consumer is the arbiter of what shall be studied. If most people attending school want to use it as a lever for rapid, immediate employment and social advancement, the curriculum shifts accordingly. And shift it did in the community colleges because of their administrator-dominated leadership and commitment to serving the public. The colleges had no vociferous alumni group that would object to an expanded mission for their alma mater, no entrenched faculty sufficiently powerful to deflect the drive for new students and new missions. If their leaders had difficulty in modifying sting programs they merely added new ones; growth provides its own dynamic for change.

The colleges had been organized to provide the first two years of

(2)

the baccalaureate sequence and, during the 1920s and 1930s, that continued as their primary function, with the majority of students expecting eventually to transfer to baccalaureate degree institutions. The American Association of Junior Colleges, the major institutional association, early-on adopted the definition of junior college as "An institution offering two years of instruction of strictly collegiate In 1925 the Association amended its definition to include the statement, "The junior college may, and is likely to, develop a different type of curriculum suited to the large and ever changing divic, social, religious, and vocational needs of the entire community in which the college is located. It is understood that in this case, also, the work offered shall be on a level appropriate for high school graduates (Bogue, 1950, p.xvii)." But the Association also reiterated its original declaration that where the colleges offered courses usually offered by senior institutions, "These courses must be identical, in scope and thoroughness, with corresponding courses of the standard fouryear college." This early interest in transfer education survived so that by 1980 more than half the enrollments still were in courses that carried credit transferable to senior institutions.

During the 1930s and 1940s many community college leaders sought to expand occupational training as an addition to the transfer function. Pointing to the rising educational level demanded by the nation's employers, they advocated the development of technological training programs. Whereas the secondary schools of the time were teaching crafts and home economics, the community colleges would prepare people to enter the work force in positions for which craft training would not

suffice. The emergent electrical, radio, aircraft, and health technology fields all found a place in the community colleges of the time, but as late as 1960, only one-fourth of the students were enrolled in occupational programs. With the passage of the federal Vocational Education Acts in the early 1960s, occupational programs increased so that by 1975 35 percent of the students were enrolled in programs designed to lead to immediate employment. The types of degrees awarded by community colleges reflect that expansion. In 1970-71 they awarded just over 250,000 degrees with less than 43 percent of them given to occupational program graduates. In 1979-80 they awarded slightly more than 400,000 degrees with more than 62% of them given to occupational program graduates (Table 2).

Programs for adults also became popular during this period of rapid community college growth as the colleges began offering courses designed to appeal to adults who may never have attended college or had chosen to return for occupational upgrading or for their personal interests. The colleges particularly sought out middle-aged students, providing programs especially tailored for them and offered at night and on weekends. They recruited senior citizens; at least half the colleges offered tuition reductions, special classes, or entire programs for persons over age 65. The success of these efforts is reflected in the mean age of the community college student body which, by 1980 was 29 years.

The colleges' enrollment of part-time students also contributed to their growth. In 1968 they enrolled 1.9 million degree credit students, 47% of whom were attending part-time. In 1982 they enrolled 4.9 million

students with 63% of them attending part-time (Table 3). And those figures do not include the students who enrolled in non-credit courses such as hobby and recreational activities, high school completion courses, and short term occupational studies. With the exception of New York and North Carolina, in the 14 states with community college enrollments greater than 50,000, part-time students outnumbered the full-timers. And just as the colleges made particular effort to recruit older students, they also sought out the part-timers by making attendance easy. They offered classes at off-campus centers and in various work places. They did not require that students complete programs in a given span of years.

Students of lower ability swelled community college enrollments. Most American colleges have had some type of selectivity in admissions, but the community colleges tend to have markedly reduced requirements. As an example, more than half the colleges allow students to attend if they are of a minimum age (usually 18) and/or they present a high school diploma. Only around one-fourth of them ask the student to present ability test scores, and few, if any, use the students' high school grade point average as a criterion for admission. This has resulted in a high proportion of students with poor prior academic records attending community colleges. Whereas 62% of the full-time students entering all postsecondary institutions in 1983 were from the top 40% of their high school class, only 47% of that group entered community colleges (Table 4). And the scores made by the matriculants who took the American College Testing Program's battery reflect a steady decline in ability that has persisted for nearly two decades (Table 5).

The college attracted sizable proportions of the ethnic minorities attending higher education and similarly high proportions of students from low- income families. By 1980 the colleges were enrolling nearly 40% of the ethnic minority students involved in American higher education. More than half the minorities beginning college began in a community college. The distribution of family income similarly showed a tilt toward low income students: 54% of all first-time, full-time students entering college were from families with annual incomes of less than \$35,000 but 74% of the community college matriculants fall into that category (Astin & Others, 1983).

The availability of a college campus within reasonable commuting distance has a marked effect on the percentage of people who attend college. Most of the community colleges have been built in the cities or the suburbs, a location that encourages college attendance since students may participate even while living at home and/or maintaining employment. Only a minority of community college students reside on campus; few urban-centered institutions have residential facilities. This has enhanced the attractiveness of the institution for low-ability students and for those who are only casually committed to schooling.

The community colleges have grown also by absorbing educational functions previously offered by other agencies. Many of them have taken over law enforcement programs from the police academies, firefighter training from the fire departments, and health technology and nursing programs from the hospitals. In many cities they have absorbed the adult basic education function, the literacy training that was formerly carried out by the adult division of the elementary or secondary school

district. Furthermore, numerous former adult education centers and technical institutes entered the universe of community colleges when they began offering associate degrees. This has happened in several states, including Iowa, Nebraska, Wisconsin, North Carolina, South Carolina, and Georgia. And in Kentucky, Hawaii, Pennsylvania, and other states where the public universities have organized two-year branches, these too are included in the data on community colleges.

One more characteristic should be noted in this catalog of reasons for community college expansion: compared with most four year colleges, they are more economical to operate. They have more modest facilities, smaller libraries, fewer laboratories, practically no support for academic research. Data collated by the National Center for Higher Education Management Systems indicate that the public two-year colleges are the lowest of all higher education institutions in all categories of revenue including state and local appropriations per student, tuition revenues, private gifts, and government grants and contracts. They receive around 70% of their revenues from state and local aid apportioned on a per-student basis and around 15% from tuition and fees. Their percentage of state aid has been rising steadily over the past 40 years with their local support diminishing in commensurate fashion (Table 6). These characteristics of low income prevail even though the community colleges' faculty salary scales compare favorably with those in general baccalaureate colleges and in colleges specializing in professional training. The reason is that faculty-student ratios are much higher in community colleges, standing at approximately 28 to 1 in the academic-transfer courses. However, as in senior institutions, the

cost saving that was supposed to accompany the introduction of instructional technology never appeared and, coincident with a leveling in enrollment and the union-negotiated class size limitation, perstudent cost of instruction may show a rapid increase.

The focus on growth and its corollary, access for everyone, continue unabated for fifty years, ending only in the early 1980s when the percentage of young people graduating high school and entering college stubbornly stopped growing too. However the decades of growth had had their effect. In an institution that derives nearly all its income based on the number of people attending, growth usually means that additional funds accrue more rapidly than costs rise. Hence during an era of growth, free money appears and institutional leaders feel no hesitancy about adding functions. But static or declining enrollments have the opposite effect; appropriations fall more rapidly than costs, and leaders are faced with making uncomfortable decisions about which programs to cut, which people to dismiss. That was the condition prevailing in a sizable proportion of the colleges in 1984.

In summation, access and growth have been the community colleges' dominant values. They have opened their doors to people who could not afford the expense of moving away from home and establishing full-time residence at a senior institution. Their tuition charges are lower and they take everyone with little regard for prior academic achievement. They organize programs for everyone, from displaced workers to illiterate adults. They have offered activities to accommodate people's interest in solving personal problems such as aging, substance abuse, and adjustment to divorce. They are truly the people's colleges and

Faculty

Studies of community college instructors have found that they are a group differing in demographic characteristics, attitudes, and values, from their senior institution counterparts and from the administrators and trustees in their own institutions. The community college faculty teaching transfer credit courses typically hold the master's degree. This has been true since the earliest years of the institution: a 1930 study showed 59% of the community college instructors with a master's, 5% with a doctorate; by 1970 74% were holding the master's, 15% the doctorate (Cohen & Brawer, 1982, p.77). The instructors of occupational subjects frequently hold less than the master's degree since their certification tends to be based on experience within the trades that they teach. Members of both groups have relatively high teaching loads. The instructors of transfer courses teach from 13 to 16 hours per week -- four or five classes with around 30 students in each. occupational program faculty often teach longer hours since they are involved in clinics and laboratories.

The faculty tend not to be members of academic disciplinary associations. As an example, less than 7% of the people teaching history belong to the American Historical Association. Similar figures pertain for community college faculty membership in the American Philosophical Association, the American Sociological Association, the American Psychological Association, and so on: The reason for this is partly the fault of the associations; for example prior to 1973 the American Sociological Association required the doctorate for membership.



Furthermore, the publications and conferences sustained by the associations tend to have little to do with the realities of teaching in community colleges. Where associations have been formed with the intent particularly to involve community college instructors, their success ratio has been much higher. The Community College Humanities Association, for example, has developed into a thriving national association over the past five years. Overall, in 1983 63% of the instructors teaching history, foreign languages, political science, and the other disciplines within the humanities claimed association membership, with most of them involved either in CCHA or in especially designated subgroups of the major foreign language, English, and music educators' associations.

The faculty union movement has made greater inroads in community colleges than in senior institutions; more than one-third of the community college instructors are working under contracts negotiated through collective bargaining. Community college faculty organization is at least partially related to their lack of disciplinary affiliation. Their allegiance is to their local colleagues, not to a community of scholars across the land. The bargaining units may or may not include the part-time faculty, which is a point of some consequence since in 1980, 56% of the community college instructors were part-timers (Table 7).

Are the faculty satisfied with their working conditions? Until the 1960s the local secondary schools were the largest single source of community college instructors. For those who moved from a secondary school to a community college, faculty satisfaction was high because

they had moved to a higher status position and a reduced teaching load. The less satisfied instructors tended to be the younger ones coming in directly from graduate school (Cohen & Brawer, 1982, p.81). General satisfaction notwithstanding, many instructors expressed dissatisfaction with the abilities of their students and with the long teaching hours. The faculty continually plead for better qualified students; several surveys of the faculty teaching humanities and the liberal arts conducted by the Center for the Study of Community Colleges have shown around one-fourth of the faculty consistently desiring that stricter prerequisites be set up before students may be admitted to their classes. Around the same percentage of the faculty would also prefer smaller classes (Brawer, 1984). Thus, despite the pronouncements of administrators and institutional associations representatives, spokespersons who continually refer to the open access, something-foreveryone characteristic of their institutions, the dominant faculty ethos continues to be that of small classes with well prepared students in attendance. In one large, urban community college district recently, the faculty bargaining unit negotiated a teaching load reduced from 15 to 12 hours per week; in return they relinquished all sabbatical leaves, instructional development grants, and travel funds. They saw lower teaching loads as more crucial to their professional well being and satisfaction than the perquisites that faculty historically have indicated as being essential for their professional currency.

These conflicting values, with administrators and governing board members seemingly seeking institutional growth regardless of the characteristics of the students, and the faculty desiring smaller

classes, better prepared students, and reduced teaching loads were deferred throughout the period of community college expansion. growth in occupational studies presented little problems; in most institutions separate instructional divisions were maintained. The occupational programs had their own deans, budget lines, funding sources, credentialing structures for the faculty, sets of admissions standards for the students, program goals, and student follow-up-But the difficulty with the low-ability students has never been resolved. The question of how to make up for several years of learning deficiencies could not be answered. Even though remedial programs were established, they were usually funded as a part of the transfer program and were staffed by faculty with credentials similar to those held by the instructors in the transfer credit courses. Furthermore, the 1960s and 1970s saw a decline in the standards for admission to the transfer credit classes which came to be increasingly populated with students of lesser ability. A variety of successes with small groups of functional illiterates was achieved in some colleges but, taken at large, the poorly prepared students remained the most intransigent problem for the faculty and, indeed, the entire institution.

# Curriculum and Instruction

The transfer curriculum in community colleges has always been marked by the types of students attending the classes and the faculty teaching them. In the early years, when most of the faculty were recruited from secondary schools, the liberal arts courses were frequently taught as modified versions of the same courses as those

presented in the high schools. They were centered on the textbook with little indication that students were expected to do independent study. In the middle years, the 1950s and 1960s, the slogan, "Our courses are just like those offered in the universities" was often heard. As more of the faculty entered community colleges directly from university graduate programs, they were inclined to teach college type courses with expectations for students to write papers and read beyond the assigned textbook.

When the full extent of the decline in student abilities was felt in the community college of the 1970s, expectations in the transfer courses and student behavior changed notably. These modifications were traced by Richardson and others (1983) who showed how the requirements for reading and writing in all courses, including general education and the liberal arts, had been reduced in one representative community college. Students were expected to read little but the textbook and 'even in that they were reading not for content or ideas but only for the minimal amount of information needed to pass quick-score examinations. The expectations for student writing had dropped as well so that students wrote at most a few pages in any course. These findings were corroborated in several studies conducted by the Center for the Study of Community Colleges showing that nationwide, students were required to write papers in one in four humanities classes, one in ten science classes; under half the instructors in all of the liberal arts areas gave essay examinations (Cohen & Brawer, 1982, p. 156). It is important to note here that this phenomenon of attenuated course requirements was not restricted to community colleges; it afflicted all of higher

education. However, it was accentuated in community colleges which have always drawn their students from among the less well prepared segments of those who did go to college. The declining abilities of high school graduates in the 1970s merely made that situation more pronounced.

Faculty members in most community colleges tried a variety of instructional innovations to increase the value of their courses. Audio-tutorial instruction in biology, video-taped presentations in the social sciences, computer-assisted language instruction, and taped and filmed sequences in the humanities and fine arts were all developed and used by the instructors. However, the efforts to teach the poorly prepared students, most of whom were attending part-time, took its toli not only on the faculty but also on the curriculum. By 1980, 90 percent of the enrollment in community college liberal arts classes was in courses for which there was no prerequisite; one-third of the enrollment in mathematics classes was in courses in which the content was less-than algebra and three out of eight students taking English classes were in remedial sections.

Policies of funding and course articulation affect transfer studies in the community colleges as much as do the types of students who attend. In most states the liberal arts and occupational courses are funded on different schedules, with occupational courses receiving higher per capita reimbursements. Accreditation standards reinforce this differential funding which affects faculty-student ratio and the patterns of equipment and assistance available to instructors in the occupational programs. State coordinating boards may also direct the community colleges to eliminate those transfer courses that are offered

as junior-level options in the senior institutions. Internally the minuscule proportion of students who complete two years at the community colleges makes it difficult to maintain a full complement of specialized sophomore level courses. This has a spiraling effect so that the fewer specialized courses offered, the fewer students stay at the colleges for their second year.

Around 50 percent of the community college effort is devoted to courses in the humanities, sciences, social sciences, mathematics, and fine arts. This curriculum is based on an amalgamation of the general education innovations that were brought into the community colleges during the 1940s and 1950s together with the liberal arts as specified in university freshman and sophomore studies. education/liberal arts curriculum is maintained in community colleges because it forms the core of transfer studies, hence is the basis of preparation for students who would go on to the baccalaureate. This curriculum is also required for graduation with the associate in arts or associate in science degree; most institutions, either by state regulation or by their own internal rules, require between 18 and 30 units in general education/liberal arts. This area of the curriculum also draws some students from among those attending community colleges for their own personal, interest with up to 20 percent of the enrollment in those courses drawn from members of that group.

The liberal arts courses are influenced by the universities through formal articulation agreements and by informal arrangements between individual instructors and academic departments. The articulation agreements may be as strict as requiring common course numbering within

a state system of universities and community colleges, and with senior instruction approval of syllabi and course content for those courses that carry transfer credit. On the other hand, the community colleges may be given such latitude in the construction of the transfer courses that the resemblance between a community college course and a university freshman course may stop with the course number and title. University influence is also exerted through informal associations and professional meetings where faculty from both institutions discuss textual requirements, content, ideas, and syllabi.

The academic transfer function is centered on the liberal arts because of tradition and the need to articulate those courses for the benefit of the students who transfer to the universities. However, the liberal arts are being modified somewhat to fit the realities of the community colleges. They are offered in the community service and continuing education divisions not for credit, but much in the fashion of similar presentations in university extension divisions. Segments of the liberal arts are offered in occupational courses and most community colleges maintain a liberal arts requirement for students in their This serves those students well when they occupational programs. transfer to senior institutions as many of them eventually do. Transfer education in community colleges has also been modified through the implementation of interdisciplinary courses in the sciences, social sciences, and humanities. Instead of offering the students a choice of fulfilling transfer requirements through specialized courses in history, art, music, philosophy, those disciplines are combined into single courses with such titles as "Mirrors of the Mind" or "The Art of Being

Human." And in some community colleges the students' desire for transfer studies is being combined with their need to work by having them enroll in cooperative work experience-based liberal arts programs arranged so that students take courses for transfer credit but also study aspects of the workplace concurrently.

In summation, the community college transfer curriculum has a flat profile with a liberal arts bias. Most of its enrollments are in introductory courses and/or courses that have no prerequisites. Add to these the remedial courses that are supposed to prepare students for the transfer credit courses and the form of a curriculum that is grade 13 plus remedial appears. This has opened a gap at grade 14 that makes it difficult for a student to complete two years and then transfer.

## Transfer

How many students do transfer? The data are unreliable. The number of students completing two years at community colleges and transferring to universities probably averaged around 25 percent during the early years of those institutions. They were built as transfer institutions and they did their job by giving people from the local area the first two years of baccalaureate studies and then sending them on to the universities. Around 75 percent of the curriculum in those early colleges was in the liberal arts and traditional academic studies.

More recently the number of students completing two years and then transferring has remained constant but the percentage has declined to around five percent of the total enrollment. What has happened is that the divisor has grown as the community colleges have expanded their offerings into areas other than those serving the traditional

baccalaureate-bound students. Moreover, the pattern of college attendance has changed with greater percentages of students attending part-time, dropping in and out, taking courses concurrently at community colleges and universities, transferring from the community colleges and back again, and transferring after obtaining less than 60 units or the requirements for an associate degree at the community college. Around half the students in the academic classes say that transfer is their primary goal (56 percent in a 1983 Los Angeles Community College District survey) (Center for the Study of Community Colleges, 1984), but most of the other half also take transfer credit courses to fulfill occupational program graduation requirements or for personal interest. This blurs the figures. Who is a transfer student? One who states that as a major purpose for attending? If so, nearly half the people taking courses for transfer credit should not be counted.

Transfer education figures suffer also because the function is confounded with occupational education. A 1978 California statewide longitudinal study showed that more than one-fourth the students enrolled in occupational programs indicated they intended transferring and more than one-fourth the students enrolled in transfer credit courses indicated they were attending college to gain job-related skills (Hunter and Sheldon, 1980). And a 1983 Los Angeles District study found 35% of the students in the latter group (Center for the Study of Community Colleges, 1984). Accordingly, the figures on the number of students transferring from community colleges are weakened by counting as a potential transfer student anyone enrolled in a transfer credit course.

Nor is the question of the number of students transferring made easier to answer when the only people counted are those who actually matriculate at senior institutions. In some states students are counted as transfers if their college of last attendance was a community college; in others they must have attained 30 units or more at a community college before they are so counted. Few states bother to collect data on the number of their students who transfer from community colleges to senior institutions in other states. Reverse transfers, those students who leave the university, matriculate in a community college for one or two semesters; then return to the universities are counted in some states, not in others (Cohen, 1979). Probably the only accurate way of determining the community colleges' contribution to baccalaureate education would be to examine the transcripts of baccalaureate-degree recipients and determine how many of their bachelors degree course requirements were met in community colleges. Such studies have been done in single institutions (See, for example, Menke, 1980) but no such data are collected systematically.

The rate of transfer seems not to concern those community college leaders who propound access as their institutions' primary contribution to American higher education. But their view is not shared by everyone affiliated with the institutions. Studies of faculty and other campus staff people often reveal counterviews. In 1973 a survey of faculty and presidents showed how certain institutional functions were perceived as being at variance with the values of the respondents. For example, the college goal to "Provide some form of education for any student regardless of ability" was seen by both faculty and presidents as being

much more closely realized than it should be. On the other hand the goal to "Help students respect their own abilities and limitations" was seen as not being as high on the scale of activities as it should be (the faculty felt that should be the primary goal of the college) (Bushnell, 1973). In reviewing the results of the Community College Goals Inventory that was administered in colleges in the late 1970s, Cross found the staff perceiving that the curricular functions of general education, vocational- technical studies, and accessibility were ranked first, second and third as actual goals but they felt that vocational studie uld be first, the college as a community second, and general education wird. There were further wide divergences between what "is" and what "should be" on several other goals. The staff tended to feel that intellectual orientation, remedial studies, and the college as a community were less pronounced than they should be whereas life-long learning, student services, and accessibility were more realized than desirable (Cross, 1981).

There is a paradox in the community college's approach to transfer studies. Most community college leaders understand the desirability of transfer education; it maintains the link with higher education that they developed throughout the early decades of the institution, and it fits the expectations of many of their constituents who still look to the institution as a low cost, ready-access point of entry to postsecondary study that itself leads to better social and career positions. On the other hand, occupational education is presumed to ameliorate social problems by providing a trained work force that enhances the nation's economy and to assist individuals by preparing

them for higher paid employment than they could receive without specialized training. Accordingly, and especially since the passage of the Vocational Education Acts, community college leaders have seized upon the idea of career education and the monies available for it, and many of their constituents also accept career education as an equally valid function for the institution.

The paradox appears when the transfer and occupational programs are compared. Typically students enrolled in programs leading to associate in arts degrees and/or transfer with a major in a traditional academic subject receive less guidance and are faced with fewer specific requirements. In many instances they may choose any humanities, sciences, or social science course from a list of options in order to fulfill a one-course or two-course graduation requirement in each of those areas. The transfer program typically has open entry; students may matriculate even when their goals are indistinct. Within the classes they face minimal demands for reading and writing. The size of classes in the humanities and social sciences tends to be limited only by the size of the room or by negotiated contracts that specify maximum class size. Institutional support for the faculty in the transfer or liberal arts area may include media preparation facilities but few faculty have access to paraprofessional assistants or readers.

The occupational programs are much more structured. Their facilities include laboratories and workshops along with equipment and tools. Their curriculum is restrictive with required courses to be taken in sequence. Admission to the programs is selective; students may often to take a year or two of college level courses before

being admitted to the allied health or high technology programs. Each program typically has a lead faculty member and instructors who work together as a group.

Granted that the occupational programs operate within different sets of accreditation guidelines and that state and federal monies are often earmarked for them, if both they and the transfer programs were considered of equal utility they would not be organized as differently as they are. Prior to the 1960s transfer education was the more highly regarded. Facilities for occupational education were poor and the faculty in those programs were in some cases prohibited from fully participating in academic governance activities. More recently, career education has been ascendant with a concomitant reduction in the status of the traditional freshman and sophomore courses. If both were equally valued, they would be more proximate in terms of teaching load, requirements for student entry, enforcement of prerequisites in curriculum, and academic support services.

Still, the occupational studies are not antagonistic to transfer education. Sizable numbers of students who complete community college programs in nursing, allied health, engineering technologies, data processing, agriculture, forestry, and many of the other advanced technologies eventually transfer and complete baccalaureate studies; it may well be that more students transfer from occupational programs than from the biberal arts curriculums. The true antagonists to the transfer function are the non-sequential activities that fall within the definition of community education.

Community Education

Community education is that portion of community college effort that falls outside the traditional graded curriculum. It includes activities as diverse as non-credit courses in the arts and sciences, remedial and high-school makeup programs in adult basic education, open forums on contemporary public issues, recreational activities, short courses in specialized occupational skills, and contract programs organized for particular industries: Figures on its magnitude are not reliable but the 1983 Community, Junior, and Technical College Directory shows 4.3 million people enrolled in community education. College leaders justify the effort with the rationale that a true community college must offer more than a graded program.

The problem with community education is that it confounds access with education and leads to a blurring of the college's image and function. The college becomes viewed by its constituents more as a place where various meritorious activities are undertaken, less where a student seriously bent on obtaining a baccalaureate degree should The problem is compounded by the varied patterns of funding community education, much of which is self-supporting through fees paid by participants, but some supported by funds earmarked for the graded curriculum. The latter effect is realized when the cost of the remedial courses and of the sizable proportion of students in the courses that carry transfer credit but who have no intention of transferring are recognized as costs of community education. It is undoubtedly important to offer courses in the use of office equipment to people wishing to upgrade themselves within their occupations, and to offer courses in painting or piano playing to people who already have college degrees but

it is detrimental to the perception of the college as a provider of

The people served through community education efforts do not fit typical student categories. They do not enroll in programs leading to degrees; they may not even be enrolled in formally structured courses but may be participating in events especially tailored for their interests. Therefore, any attempt to fund community education on the basis of average daily attendance, full-time equivalent, or some other category that suggests students attending courses leading to degrees or certificates on a campus is at variance with the intent of the program and the pattern of student participation.

Grades 13 and 14.

For community colleges to successfully maintain community education operations, they should be reorganized along one or another changed model. Ideally community education would be funded programatically; that is, a college would be awarded a fixed sum each year to provide cultural, occupational upgrade, recreation, personal interest, community health, and semi-professional retraining programs to the people of its districts. Or the colleges could maintain their open access policies with students taking courses that may or may not lead to degrees but build a transfer or honors college within such a structure. funding pattern would be for individuals participating in courses with reimbursement on an attendance basis, but the transfer or honors college would be operated separately with a variety of especially funded enrichment opportunities and work assistance or scholarship monies made available. Another way of separating community education efforts might be to maintain the college's transfer and occupational functions but to

split off the community service into an extension division, as many universities have done. This would put all community education on a self-sustaining basis with people who take short courses or who participate in activities paying for them ad hoc. (The elimination of the local-tax basis of funding California community colleges that was effected in 1978 has forced such reorganization in that state.) Still another way of maintaining the traditional college with a community education component would be to place the community service work along with the remedial and adult basic education function in a separate center that would have staff members teaching the students not on a class-hour basis; they would be people working 40 hours per week and they might or might not have standard teaching credentials. Such centers have been organized under the aegis of the community colleges in Chicago, Phoenix, and San Francisco.

For now, though, to the extent that community education activities are merged even conceptually with the transfer and occupational education functions, they all are weakened. Community service activities cannot flourish when they are presented by people with traditional views of instruction and when they are funded ad hoc. The transfer function is weakened when it coexists with community service activities in which people get college transfer credit for participating in courses and events even when they are not intending to gain degrees. The people enrolled in courses that carry transfer credit who either already have associates, bachelors, or graduate degrees, or have no intention of taking courses in a sequence that lead to degrees are truly community education students but since they are mingled with the

students intending to transfer, the transfer function is blurred. And the occupational programs, suffer when the figures on the number of people gaining employment in the areas for which they were trained are reduced by the number of students transferring to senior institutions instead of going to work.

# Transfer Education's Future

The prognosis for the transfer function depends in some measure on developments external to the community colleges. If the universities develop occupational programs better articulated with those in the community colleges, the transfer function may center on preparing students to enter junior level programs leading to bachelor's degrees in health fields, technologies, and the professions. And if entrance to those programs continues to depend on students completing courses in the humanities, sciences, social sciences, mathematics, and English usage, those areas will continue to thrive in the community colleges. Still an open question, though, is the extent to which the community colleges can succeed in preparing students who lack the basic skills of reading, writing, and computation. Here again they may be bolstered in their efforts, if the secondary schools tighten graduation requirements and reduce the number of functional illiterates that they pass through to postsecondary education.

The transfer function will also be affected by the extent to which the community college leadership seeks to maintain their institutions' place in the formal education system. Many of the community colleges have stretched the bounds of their legitimacy within the system by their efforts at community education and by their offering certificates that

do not qualify the recipients for entrance to the next level within the structure. However, a reversal of that tendency seems now to be going on as demands for sophomore tests screening people for entry to the upper division in the university are expanding. Florida, for example, has recently instituted such a test on a statewide basis.

The coming years will see a struggle between those who would keep the community colleges within the educational system and those who would take their institutions ever closer to the system's periphery. The colleges weaken their position to the extent they pass nearly all students through or nearly none. In the first case they are not likely educating but are acting merely as custodial institutions and rewarding the students with course credits that have little value for entrance to the next level. Since higher education historically has been selective; the colleges that award transfer credit to students who have completed remedial or otherwise low-level courses merely jeopardize those students' chances for matriculation at the junior level. But the community college that passes nearly no one through its transfer programs similarly moves toward the periphery of the system because its educational offerings are too much at variance with those provided by the institutions at the core. Accordingly it does a disservice to the groups it purports to serve because they are not being provided with that most important benefit of another year of schooling: a ticket to advance to the next level.

The tug-of-war will undoubtedly continue. The community colleges are still looked upon by many of their matriculants as the point of first entry to higher education. Although the efforts to attract adults

have had the effect of increasing the mean age of the student body to 29 years, the median age is 22 and the modal age is 19. Most of the students entering the institutions just out of high school still expect eventually to transfer and obtain higher degrees.

How can transfer education be strengthened? That question is being asked by many educators and agency officials. Several projects to help maintain the transfer function and the traditional academic courses in community colleges have been funded by the National Endowment for the Humanities, the Ford Foundation, the Andrew W. Mellon Foundation, and several additional agencies whose directors realize the importance of the community college as an element in the nation's postsecondary education effort and of the liberal arts and transfer education as an essential component of those studies.

One way that community colleges might enhance transfer studies is to modify college practices. Stronger articulation agreements can be negotiated with receiving senior institutions and with the secondary schools that send students to the colleges. Counseling can be strengthened with the addition of computerized academic and graduation information systems that keep the students apprised of their progress toward completing the associate degrees and/or readying themselves for transfer to particular programs at the junior level. Entry-level testing can be introduced as a way of directing students toward remedial or compensatory education courses within the colleges. (Prior to the 1960s most colleges had such programs but they were allowed to lapse when testing fell into disrepute in the late 1960s and 1970s.) Liberal arts courses can be arranged in sequence and prerequisites enforced so

that students in the transfer programs have some semblance of common experience. Interdisciplinary courses in the liberal arts can be built and required for all matriculants regardless of the degree, transfer institution, or career that they are contemplating. Academic support services, including tutorials, can be mandated so that poorly prepared students who did enter transfer classes would be required to spend time in a learning laboratory working on course-related materials. Citizens' advisory committees to the transfer program can be formed as a way of gaining lay support for that function. All these efforts have been made and recent events suggest they will accelerate. The challenge lies in strengthening transfer education even while maintaining access to all and the broader educational efforts that have marked the community colleges in the second half of the century.

The community colleges found a niche in the educational system by offering low-cost, degree-credit, and non-credit programs in hometown settings for low-ability, part-time, minority-group, and low-income students who probably would not have otherwise participated in higher education. In so doing, they helped to expand the system's boundaries by putting pressure on the traditional colleges to modify their programs in order to accomodate the greater numbers of students who sought even higher levels of schooling. But at what cost to themselves? In their early years the junior colleges were easily accessible points of entry to higher education. Their grades 13 and 14 were the culmination of high school for some students, the beginning of college for others. Now, their low percentage of students in sophomore-level courses and their low percentage of students transferring (both less than 10

percent) coupled with the sophomore-level tests to be administered to students intending to transfer to the junior year in some state universities, suggest they are operating near the system's periphery. The recent calls for a renewed emphasis on excellence and quality in their programs reveal their leaders' concern that their degrees and certificates not lose their credibility (McCabe, 1981).

Their problem now is to reconcile the diverse educational opportunities that they offer for their broad clientele with their need to stay within the graded system by maintaining the value of their diplomas. In order to continue serving the high-risk students, they cannot afford to exercise excessive selectivity in their graded programs. And in order to continue offering short courses for the public through their community education activities (whether or not so designated), they cannot return to the junior college model of Grades 13 and 14 plus sequenced occupational programs.

The community college grew by providing access to the previously disenfranchised. Must an institution committed to access necessarily move toward the educational system's periphery? If so, the core will always be reserved for an elite group of students and schools. The efforts being made in community colleges that are tightening requirements for sequence, enforcing course prerequisites, and providing various forms of assistance for students intending to transfer suggest that at least some college leaders recognize the need for a strong educational program with an open-access institution.

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Estimated Retention Rates, <sup>1</sup> 5th Grade through College Entrance, in Public and Nonpublic Schools: \*\*United States, 1924-32 to 1973-81

| School years pupils    |           | High s | choo1  | 1st time         |
|------------------------|-----------|--------|--------|------------------|
| entered 5th grade      | 9th grade | gradua |        | college students |
|                        |           | No.    | Year   |                  |
| 1924-25                | 612       | 302    | 1932   | 118              |
| 1934-35                | 803       | 467    | 1942   | 129              |
| 1944-45                | 872 .     | 553    | 1952   | 234              |
| 1954-55                | 915       | 642    | 1962   | 343              |
| 1956-57                | 930       | 676    | 1964   | 362              |
| Fall 1958 <sup>2</sup> | 946       | 732    | 1966   | 384              |
| Fall 1960              | 952       | 749    | 1968   | 452              |
| Fa11 1962              | 959       | 750    | 1970   | 461              |
| Fall 1964              | 975 _     | 748    | 1972   | 433              |
| Fall 1966              | 985       | 744    | 1974   | e 448            |
| Fall 1968              | 983       | 749    | 1976   | 435              |
| Fall 1970              | 982       | 744    | 1978   | 440              |
| Fall 1971              | 985       | 743    | . 1979 | 451              |
| Fall 1973              | 994       | 745    | 1981   | 469              |

Rates for the 5th grade through high school graduation are based on enrollments in successive grades in successive years in public elementary and secondary schools. Rates for first-time college enrollment include full-time and part-time students enrolled in programs creditable toward a bachelor's degree.

Source: U. S. Department of Education, <u>The Condition of Education</u>, 1981, and unpublished data from the National Center for Education Statistics.



<sup>&</sup>lt;sup>2</sup>Beginning with the class in the 5th grade in 1958, dates are based on fall enrollment and exclude upgraded pupils.

Associate Degrees Conferred by Institutions of Higher Education by Type of Curriculum,

1970-71 to 1979-80

| Year         |         | All         |          | Sciences<br>1 Programs     | Occupational Programs |  |  |
|--------------|---------|-------------|----------|----------------------------|-----------------------|--|--|
|              |         | Curriculum: | • Number | Number Percentage of Total |                       | Percentage of Total  |  |
|              | 1970-71 | 252,610     | 144,883  | 57.4                       | 107,727               | 42.6   |  |
| · 19         | 1971-72 | 292,119     | 158,283  | 54.2                       | 133,836               | 45.8   |  |
| <del>-</del> | 1972-73 | 317,008     | 161,051  | 50.8                       | 155,957               | 49.2   |  |
|              | 1973-74 | 343,924     | 164,659  | 47.9                       | 179,265               | 52.1   |  |
|              | 1974-75 | 360,171     | 166,567  | 46.2                       | 193,604               | 53.8   |  |
|              | 1975-76 | 391,454     | 175,185  | 44.8                       | 216,269               | 55.2   |  |
| 4            | 1976-77 | 406,377     | 171,631  | 42.2                       | 234,746               | 57.8   |  |
|              | 1977-78 | 412,246     | 167,036  | 40.5                       | 245,210               | 59.5   |  |
| •            | 1978-79 | 402,702     | 157,572  | 39.1                       | 245,130               | 。60.9  |  |
|              | 1979-80 | 400,910     | 154,282  | 38.5                       | 246,626               | 61.5   |  |
|              |         |             |          |                            |                       | e esta de la composición dela composición de la composición de la composición de la composición de la composición dela composición de la c |  |

Sources: U.S. Department of Health, Education, and Welfare, 1978.

U.S. Department of Education, <u>Digest of Education Statistics</u>, 1982.

TABLE 3

Part-Time Enrollments as a Percentage of Total Enrollments, 1963-1982

| Year  | Opening Fall<br>Enrollment | Part-Time<br>Enrollment | Percentage |
|-------|----------------------------|-------------------------|------------|
| -1963 | 914,494                    | 488,976                 | 53         |
| 1968  | .1,909,118                 | 888,458                 | 47         |
| 1969  | 2,234,669                  | 1,064,187               | 48         |
| 1970  | 2,447,401                  | 1,164,797               | 48         |
| 1971  | 2,678,171                  | 1,290,964               | 48         |
| 1972  | 2,863,780                  | 1,473,947               | 51 .       |
| 1973  | 3,100,951                  | 1,702,886               | 55         |
| 1974  | 3,528,727                  | 1,974,534               | 56         |
| 1975  | 4,069,279                  | 2,222,269               | 55         |
| 1976  | 4,084,976                  | 2,219,605               | 54         |
| 1977  | 4,309,984                  | 2,501,789               | 58         |
| 1978  | 4,304,058                  | 2,606,804               | 61         |
| 1979  | 4,487,872                  | 2,788,880               | 62         |
| 1980  | 4,825,931                  | 2,996,264               | 62         |
| 1981  | 4,887,675                  | 3,070,087               | 63         |
| 1982  | 4,964,379                  | 3,115,055               | . 63       |

Source: American Association of Community and Junior Colleges, 1965-1983.



TÄBLE 4

High School Academic Performance of College Freshmen, 1983

| Monaya of Anadamia D. Santa                         | Percentage of Enrollment  |
|---|---|
| Measure of Academic Performance                     | All Institutions All 2-Year Colleges  |
| Rank in High School                                 |   |
| Top 20% Second 20% Middle 20% Fourth 20% Lowest 20% | 39.4 24.7<br>22.8 22.4<br>30.6 41.9<br>6.2 9.3<br>1.0 1.7   |
| Average Grade in High School                        |   |
| A or A+ A- B+ B- C+ C D                             | 9.4 , 4.3<br>11.0 , 6.8<br>18.6 , 15.4<br>25.8 , 28.0 , 14.2 , 16.7<br>12.7 , 16.7 , 7.8 , 11.3 , 0.5 , 0.8 |

Source: A.W. Astin and Others, The American Freshman: National Norms for Fall 1983.

TABLE 5

Mean ACT Scores for Two-Year College Freshmen, 1964-1979, 1982

| Year | English | Math | 'Soc. Sci. | Nat. Sci. | Composite |
|------|---------|------|------------|-----------|-----------|
| 1964 | 17.6    | 17.4 | 18.2       | 18.5      | 18.0      |
| 1965 | 16.9    | 17.6 | 18.8       | 18.9      | 18.2      |
| 1970 | 17.2    | 17.7 | 18.0       | 19.0      | 18.1      |
| 1975 | 15.8    | 14.9 | 15.2       | 18.9      | 16.3      |
| 1977 | 15.7    | 14.2 | 14.7       | 18.5      | 15.9      |
| 1979 | 15.8    | 13.9 | 14.4       | 18.4      | 15.8      |
| 1982 | 15.7    | 13.3 | 14.5       | 18.4      | 15.6      |

Source: American College Testing Program, (1966, 1972, 1976-77,1978-79, 1980-81, 1982-83).





Percentages.of Income from Various Sources for Public Two-Year Colleges, 1918-1980

|                          | · -               |                   | •                 |                   | Year |      |      | , .  | <i>c</i> . |
|--------------------------|-------------------|-------------------|-------------------|-------------------|------|------|------|------|------------|
| Source                   | 1918 <sup>a</sup> | 1930 <sup>a</sup> | 1942 <sup>a</sup> | 1950 <sup>a</sup> | 1959 | 1965 | 1975 | 1977 | 1980       |
|                          |                   |                   |                   |                   |      |      |      | •    |            |
| Tuition and fees         | 6                 | 14                | 11                | ,<br>9            | 11   | 13   | 15   | 18   | 15         |
| Federal aid              | 0                 | 0                 | <b>2</b> ·        | 1 .               | 1    | 4    | 8    | 5    | 5          |
| ·State aid               | , 0               | 0                 | 28                | 26                | 29   | 34   | 45   | 59   | 60         |
| Local aid                | 94                | 85                | 57                | 49                | 44   | 33   | 24   | 15   | 11         |
| Private gifts and grants | 0                 | 0                 | 0                 | 0                 | 0    | 3    | i    | 0    | 1          |
| Auxiliary<br>services    | N.A.              | N.A.              | N.Ã.              | N.A.              | 12   | 6    | 6    | 0    | 3          |
| Other                    | 0                 | 2                 | 2                 | . 2               | 2    | 7    | . 1. | 3    | 3          |

a Includes local junior colleges only.

Sources: Starrak and Hughes (1954, p. 28); Medsker and Tillery (1971, p. 115); Olivas (1979, p. 20); Richardson and Leslie (1980, p. 20); Chronicle of Higher Education (June 8, 1982, p. 8).

Numbers of Full-Time and Part-Time Two-Year College Instructors, 1953-1980

| Year              | Total       | <b>A</b> u | ll-Time    | Part-Time |                   |  |
|-------------------|-------------|------------|------------|-----------|-------------------|--|
| *                 | Instructors | Number     | Percentage | Number    | Percentage        |  |
| 1953 <sup>8</sup> | 23,762      | 12,473     | 52         | 11,289    | 48                |  |
| 1958              | 33,396      | 20,003     | 60         | 13,393    | 40                |  |
| 1963              | 44,405      | 25,438     | 57         | 18,967    | 43                |  |
| 1968              | 97,443      | 63,864     | 66         | 33,579    | 34                |  |
| 1973              | 151,947     | * 89,958   | 59         | - 61,989  | 41                |  |
| 1974              | 162,530     | 81,658     | 50         | 80,872    | 50                |  |
| 1975              | 181,549     | 84,851     | 47         | 96,698    | 53                |  |
| 1976              | 199,655     | 88,277     | 44         | 111,378   | 56                |  |
| 1977              | 205,528     | 89,089     | 43         | 116,439   | 57                |  |
| 1978              | 213,712     | 95,461     | 45         | 118,251   | 55                |  |
| 1979              | 212,874     | 92,881     | 44         | 119,993   | 56                |  |
| 1980              | 238,841     | 104,777    | 44         | 134,064   | 56                |  |
| 1981              | 244,228     | 104,558    | 43         | 139,670   | 57                |  |
| 1982              | 236,761     | 99,701     | 42         | 137,060   | • 58 <sub>?</sub> |  |

Source: American Association of Community and Junior Colleges, 1955-1982.

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